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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,718	07/21/2003	Joseph R. Allen	200210193-1	7561

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FORT COLLINS, CO 80527-2400

EXAMINER
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SHARP, JEFFREY ANDREW

ART UNIT	PAPER NUMBER
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3677

DATE MAILED: 02/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/624,718

Applicant(s)

ALLEN ET AL.

Examiner

Jeffrey Sharp

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 1/10/2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 7-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

This Office action is responsive to Applicant's amendment received 10 January 2005

#### *Status of Claims*

[1] Claims 1-6 have been cancelled by Applicant

Claims 7-14 are pending.

#### *Response to Arguments*

[2] It has been held that the recitation that an element is "adapted to" perform a function is not a positive limitation, but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138. Consequently, Applicant does not *expressly* require a first and second fastener having different thread types, as line 7 of claim 7 only requires that the inner cylindrical portion is '*adapted to*' receive at least a first and second fastener. See also, claim 7, line 21.

Applicant's statement that combining the Allen '282 reference with another reference would be '*inappropriate*' is non-persuasive, as the Examiner believes the prior art cited furnishes sufficient motivation to incorporate a 'retaining member' having a larger and smaller diameter portion for the rapid release of and engagement with a fastener.

It is not required that the prior art disclose or suggest the properties newly-discovered by an applicant in order for there to be a prima facie case of obviousness. See *In re Dillon*, 919 F.2d 688, 16 USPQ2d 1897, 1905 (Fed. Cir. 1990). Moreover, as long as some motivation or suggestion to combine the references is provided by the prior art taken as a whole, the law does

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not require that the references be combined for the reasons contemplated by the inventor. See *In re Beattie*, 974 F.2d 1309, 24 USPQ2d 1040 (Fed. Cir. 1992); *In re Kronig*, 539 F.2d 1300, 190 USPQ 425 (CCPA 1976) and *In re Wilder*, 429 F.2d 447, 166 USPQ 545 (CCPA 1970).

The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. *In re Keller*, 642 F. 2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). In this regard, a conclusion of obviousness may be based on common knowledge and common sense of the person of ordinary skill in the art without any specific hint or suggestion in a particular reference. *In re Bozek*, 416 F .2d 1385, 1390, 163 USPQ 545, 549 (CCPA 1969).

[3] With regard to remarks concerning the Munro '317 reference, Munro discloses expressly, a fastener having two different thread types (26,28), and so it is inherent from Munro's disclosure that the mounting member (17) clearly has *an inner cylindrical portion* (18) "adapted to" receive any reasonable number of *different thread types*, so long as the cross section of the threads (i.e., maximum thread diameter) is smaller than the cylindrical portion (18). See Col 2 lines 33-41. Therefore, Applicant's argument (pg 13 lines 5-8) that Munro does not teach a plurality of fasteners having different thread types is non-persuasive. All subsequent references to 'first and second fastener' are considered to be an intended use of the mounting member and retaining member.

It is to be further noted that threads (28) taught by Munro could be removed, as it has been held that omission of an element and its function in a combination where the remaining elements perform the same functions as before involves only routine skill in the art. *In re Karlson*, 136 USPQ 184. In the instant case, even if threads (28) were eliminated, the smaller diameter portion (23) of the retaining member (21) received by the mounting member (17) would still *engage* the fastener (25) at a smooth reduced diameter portion (27), enabling a *latched mode*, said latched mode preventing the removal of the fastener (25) from the mounting member (17).

Lastly, Applicant has not provided a convincing argument that there is a substantial difference in function between the retaining member (21) disclosed by Munro, and the retaining member disclosed in the instant claim 7. Although it is disclosed expressly that the retainer member (21) can flexibly separate its 'legs' to permit axial movement of a headed fastener (25), it would also be appreciated by those of ordinary skill in the art, that the retaining member (21) could be laterally displaced from the mounting member (17) either partially or completely to allow axial displacement of the fastener (25) in a longitudinal sense. In general, the retaining member (21) advantageously permits the fastener (25) to move in an axial direction, thorough the mounting member (17), without necessitating displacement of the retaining member (21) from the mounting member (17), although such displacement *is possible*. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Note that Applicant does not require both a smaller diameter portion and a larger diameter portion on the retaining member in either a latched and unlatched mode. Therefore, the smaller diameter portion may expand radially (as does Munro) to satisfy the 'larger diameter portion in an unlatched mode' limitation.

[4] With regard to remarks concerning the McCormack et al. '574 and Frattarola et al. '654 references, the fact that the securing member and means for securing the mounting member to an electronic device would not be obvious because the fastener is not removable is non-persuasive. Frattarola et al. '654 Figure 7 and Col 4 lines 37-46 clearly disclose that it is well-known in the art to provide a securing device at the end of a mounting member to beneficially facilitate a floating action for alignment purposes. McCormack et al. '574 Figures 16 and 33, clearly show that a securing device (258) can be employed to create a floating action for a mounting member, regardless of whether or not the fastener is removable. In fact, McCormack et al. show the non-swaged mounting member in Figure 16, said mounting member being capable of receiving and removing multiple fasteners of any thread type.

[5] With regard to remarks concerning the Peterson '058 reference, Applicant argues that the reference does "not disclose a mounting member having an inner cylindrical portion that is adapted to receive fasteners of different thread types" (page 13, line 2-4 of response dated 10 January 2005), and that the retaining member has "straight stretches (57) that hold the tooth in place", which are different than a '*smaller diameter portion*'. It is to be noted that what Applicant calls "straight stretches (57)", is in fact, a smaller diameter portion of a retaining

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member (51). Regardless of the fact that Peterson does not disclose two fasteners having different thread types, Peterson broadly suggests using a re-usable retaining member having two diameter portions to quickly and rapidly replace an inserted member.

[6] With regard to remarks concerning the Allen '282 reference having a common inventor and assignee, the inventive entities are different, and therefore, the Allen '282 is considered a valid 35 U.S.C 103(a) reference, as it was known "by others".

[7] Applicants remarks concerning the Allen '282 v. Swan '100 35 U.S.C. 103(a) rejection of claims 12 and 13, have been fully considered, and are non-persuasive. The mere fact that Swan does not further limit the broad limitation '*stud member*' to '*fastener having a different thread type*', is insufficient to teach away from the gist and scope of the slideable clip interaction with an inserted fastener. Swan broadly teaches a clip retaining system for mounting a surface to a housing, which releasably locks the housing to the stud member (e.g., fastener). The stud member is cylindrical, and includes (but not limited to) a widened base portion (32) (e.g., head). A variety of cross-sections may be used for the stud member. The stud member comprises a second shaft portion (34) (i.e., threads) and an annular channel (37) that receives a slideable retaining member (50) in a latched position. The retaining member (50) has smaller (54) and larger (52a, 52b) diameter portions, which correspond to latched and unlatched modes, respectively. See Swan '100, Col 1 lines 38-44, Col 2 lines 27-40, and claim 1. See aforementioned comments on the phrase '*adapted to*'.

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In short, claim 12 essentially discloses replacing a mounting fastener with another mounting fastener that correctly matches a threaded hole in an equipment rack. This method is inherent from the disclosure of Allen '282 (Col 2 lines 7-24). If it is desirable to remove the the fastener from the ferrule, the simple manufacturing step of crimping (swaging flaring, etc...) the mounting member over the head of the captive fastener to form a lip (as shown in McCormack et al US-2002/0172574) could be eliminated, as it has been held that the omission of an element or step and its function in a combination where the remaining elements perform the same functions as before involves only routine skill in the art. *In re Karlson*, 136 USPQ 184. See also, MPEP 2144.04 which states:

**Making Separable:**

*In re Dulberg*, 289 F.2d 522, 523, 129 USPQ 348, 349 (CCPA 1961) (The claimed structure, a lipstick holder with a removable cap, was fully met by the prior art except that in the prior art the cap is "press fitted" and therefore not manually removable. The court held that "if it were considered desirable for any reason to obtain access to the end of [the prior art's] holder to which the cap is applied, it would be obvious to make the cap removable for that purpose.").

In the instant case, the lip on prior art ferrules that keep the fastener (e.g., 'thumbscrew') from being removed, could be removed "if it were considered desirable for any reason" to remove the fastener -- including swapping the threaded fastener with another having a thread that correctly matches the equipment rack.

***New Grounds of Rejection***

[8] In view of Applicant's remarks (filed on 10 January 2005) with respect to the rejection(s) of claim 7-11 and 14 under 35 U.S.C. 103(a) have been fully considered and are persuasive.

Accordingly, the Examiner has removed the Tait et al. '557, Fratterola et al. '654, Peterson '058,



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and Swan '100 references as being superfluous and unnecessary. However, upon further consideration, a new ground(s) of rejection has made using the previously cited Munro '317, McCormack et al. '574, and Allen '282 references. The rejection is as follows.

***Claim Rejections - 35 USC § 103***

[9] The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

[10] Claims 7-11 and 14 rejected under 35 U.S.C. 103(a) as being unpatentable over Munro US-2,948,317 in view of McCormack et al. US-2002/0172574 and Allen US-6,682,282.

Munro teaches a mounting device comprising a mounting member (17) having at least one flange (19) and openings (20) in which a retainer (21) is inserted to engage a fastener shank (27). The shank of the fastener may have different thread types (26,28), and said mounting member has an inner cylindrical portion (18) 'adapted to' accept various thread types (26,28). The fastener (25) is captively held by a retaining member (21) in a latched mode, and released by the retaining member (21) in an unlatched mode. The mounting member (17) is secured to the electronic device (11). The general purpose of the mounting device taught by Munro is to prevent removal of the fastener (25) in a latched mode, while still allowing the fastener (25) to engage a threaded opening (16) in a panel (10). The mounting device taught by Munro further facilitates rapid removal of the fastener (17) from the mounting member (17), regardless of

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whether or not the retaining member (21) is displaced from the mounting member (17) in a direction transverse to the longitudinal axis. The retainer (21) has a smaller diameter portion (23) that can engage a threaded (26,28) or unthreaded portion (27) of a headed fastener (25) shank in a latched mode; said retainer having two larger diameter portions (24, and outwardly flexed portion 23) in an unlatched mode, so as to allow the fastener (25) to be withdrawn from the mounting member (17). The retaining member (21) has hinge-like portion connecting two resilient legs.

However, Munro fails to disclose expressly that *if* a threaded opening (12,16) of an equipment rack (10) has multiple thread types, a **second fastener** having a different thread type corresponding to the correct inner thread must be used (common sense, see Munro Col 2 lines 57-59). Further, Munro fails to disclose a **securing device** to facilitate a floating action of the mounting member.

McCormack et al. suggest that it is customary to provide a **securing device** (258, Figure 16 and 33) on a mounting member (250), in order to facilitate a floating action within a panel aperture (224) for alignment purposes. See McCormack et al. paragraph 0056 lines 35-40. Note that although McCormack et al. disclose a crimpable upper lip of a mounting member that prevents accidental removal of the fastener, it would be obvious not to crimp it, since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. *Nerwin v. Erlichman*, 168 USPQ 177, 179. Also, refer to MPEP 2144.04 which states:

Making Separable:

In re Dulberg, 289 F.2d 522, 523, 129 USPQ 348, 349 (CCPA 1961) (The claimed structure, a lipstick holder with a removable cap, was fully met by the prior art except

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that in the prior art the cap is "press fitted" and therefore not manually removable. The court held that "if it were considered desirable for any reason to obtain access to the end of [the prior art's] holder to which the cap is applied, it would be obvious to make the cap removable for that purpose.").

Allen suggests that a **second fastener** having a different thread type may be used within a mounting member, if a threaded opening of an equipment rack has a different thread type. This fastener 'swapping' is similar to the old and well-known method of matching a bolt thread with a corresponding nut thread. One of ordinary skill in the art would appreciate that it would be obvious that the threaded portion (26) of the fastener (25) should match the threaded opening (12,16) for proper securement. See Munro Col 2 lines 57-59.

At the time of invention, it would have been obvious to one of ordinary skill in the art, to modify the mounting device taught by Munro, to comprise the **securing device** taught by McCormack et al., in order to provide a floating action to the mounting member, making alignment of the holes easier when the device is used in installing heavy or delicate electronic equipment onto a rack. Note that Munro does not teach away from particular use with electronic equipment, as members (10,11) are broadly referred to as '*flanges*' similar to those found on front panels of electronic equipment and racks. It is advantageous to add alignment compensation (via a securing device or the like) with a mounting device in an equipment rack application, because one of ordinary skill in the art would recognize that without compensation, heavy electronic equipment could be knocked around or damaged during efforts to align the equipment fasteners with the mounting holes of the rack. The Examiner attests to this problem, as having prior experience in Voice Over Internet Protocol (VOIP) labs, which frequently use equipment racks and mounted electronic equipment.

It would have further been obvious from the teachings of Allan, to remove a first fastener and use a **second fastener** having a different thread-type, should the threaded opening that receives the fastener in the equipment rack have a different thread type than the first fastener. One of ordinary skill in the art would appreciate that if a mounting fastener does not have the correct thread for a threaded opening, another mounting fastener having a correctly corresponding thread must be used. Accordingly, Allen has already disclosed in the '282 patent, a fastener system comprising two fasteners having different thread types to alleviate the problem of an equipment rack having threaded openings that differ from that attached to a piece of electronic equipment, without using an adapter interface or removing the ferrule (i.e., 'mounting member') from the electronic device.

As for claim 8, see McCormack et al. paragraph 0006 lines 3-6, and paragraph 0056 lines 35-40.

As for claim 10, McCormack et al. show a biasing device (206) within the retaining member (250).

As for claim 11, the limitation '*retaining ring*' is interpreted as further limiting '*securing device*', as it requires the securing device to be annular. However, the limitation '*retaining ring*' still reads on the annular securing device (258) taught by McCormack et al.

#### ***Examiner's Comments***

[11] The below mentioned comments are some helpful suggestions by the Examiner, which might be of help and are as follows:

1) Applicant may consider removing the phrases '*adapted to*' and '*adapted to be*' where they are present, thus requiring a mounting member having an inner cylindrical portion --that **receives** one of at least a first fastener and a second fastener--...etc. The removal of the words '*adapted to*' would provide a more positive limitation.

2) Applicant may consider a securing device --which facilitates floating movement of said mounting member--. As it is written, the limitations '*a securing device*' (claim 7) and '*means for securing*' (claim 14) comprises numerous elements such as welds, press-fits, circ-clips, retaining rings, and adhesives.

3) Applicant may consider changing the word '*receivable*' (claim 7, line 6) to --received-- in order to make limitation '*electronic device*' a positive limitation. As it is currently written, the mounting member must only be *capable of* being received in an opening as an intended use.

It is to be noted that these suggestions are **NOT** to be considered an examiner's amendment in any sense, and that any particular suggestion would **NOT** necessarily put the case into condition for allowance. These are merely suggestions for clarity **NOT** meant to indicate allowable subject matter.

### ***Conclusion***

[12] The newly cited prior art made of record and not relied upon is considered pertinent to applicant's disclosure is as follows:

US 5000614 A  
US 4923272 A

USPAT  
USPAT

Walker; Donald C. et al.  
Cuda; Joseph

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US 4721331 A	USPAT	Lemelshtich; Noam
US 4352586 A	USPAT	Hayden; William L.
US 4244608 A	USPAT	Stuemky; Robert E.
US 1513710 A	USOCR	LEWIS ARTHUR J
US 3560027 A	USPAT	Graham, C. H.
US 3314696 A	USPAT	FERGUSON GEORGE R et al.
US 5593187 A	USPAT	Okuda; Nobuyuki et al.
US 4561682 A	USPAT	Tisserat; Craig R.
US 5586792 A	USPAT	Kalahasthy; Gopichand et al.
US 6044536 A	USPAT	Schneider; Wilhelm
US 5127764 A	USPAT	Baer; Mark

[13] Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

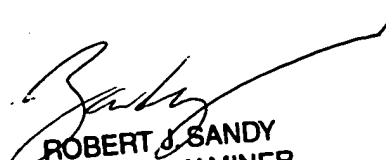
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

[14] Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey Sharp whose telephone number is currently (703) 305-0426, but will change to (571) 272-7074 in April 2005 due to a move to the Alexandria, VA campus. The examiner can normally be reached on 7:30 am - 5:00 pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J.J. Swann can be reached on (703) 306-4115. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JAS



ROBERT J. SANDY  
PRIMARY EXAMINER